

What is claimed is:

1. A liquid supply vessel comprising:  
a chamber adapted to contain a liquid, wherein the chamber comprises a floor having an opening thereon;  
a liquid dispensing apparatus having an intake and an outtake, wherein a valve is positioned between the intake and the outtake, and wherein the outtake is aligned with the opening;  
a supply line having an inlet adjacent the floor and an outlet in fluid communication with the intake, wherein the supply line extends from the floor and is substantially housed within the chamber; and  
at least one vent formed in a wall of the chamber, wherein the at least one vent is adapted to be exposed to a liquid contained within the chamber, and wherein the at least one vent is permeable to gas but substantially impermeable to liquid.
2. The liquid supply vessel according to claim 1, further comprising:  
a filter provided in the inlet of the supply line.
3. The liquid supply vessel according to claim 2, wherein the filter is adapted to prevent impurities in a liquid in the chamber from entering the supply line.
4. The liquid supply vessel according to claim 3, wherein the filter substantially blocks air bubbles when wetted.
5. The liquid supply vessel according to claim 1, wherein valve is an umbrella valve.
6. The liquid supply vessel according to claim 1, wherein the at least one vent is adapted to equalize the pressure within the chamber and the ambient pressure exterior of the chamber.

7. The liquid supply vessel according to claim 6, wherein when the altitude and/or temperature at which the vessel is maintained is increased, gas within the chamber passes through the at least one vent to equalize the pressure within the chamber to the ambient pressure exterior of the chamber.

8. The liquid supply vessel according to claim 6, wherein when the altitude and/or temperature at which the vessel is maintained is decreased, gas exterior of the chamber passes through the at least one vent to equalize the pressure within the chamber to the ambient pressure exterior of the chamber.

9. The liquid supply vessel according to claim 6, wherein when the amount of liquid maintained within the chamber is decreased, gas exterior of the chamber passes through the at least one vent to equalize the pressure within the chamber to the ambient pressure exterior of the chamber.

10. The liquid supply vessel according to claim 1, further comprising:  
a fluidic interconnect provided in the opening,  
wherein the fluidic interconnect is permeable to liquid but substantially blocks air bubbles when wetted.

11. The liquid supply vessel according to claim 10, wherein the fluidic interconnect is of a type selected from the group consisting of open-foam with a filter screen and septum/needle.

12. The liquid supply vessel according to claim 1, wherein the at least one vent is a membrane.

13. An inkjet ink cartridge comprising:

a chamber containing a supply of ink, wherein the chamber comprises a floor having an opening thereon;

an ink dispensing apparatus having an intake and an outtake, wherein a valve is positioned between the intake and the outtake, and wherein the outtake is aligned with the opening;

a supply line having an inlet adjacent the floor and an outlet in fluid communication with the intake, wherein the supply line extends from the floor and is substantially housed within the chamber; and

at least one vent formed in a wall of the chamber, wherein the at least one vent is exposed to the ink within the chamber, and wherein the at least one vent is permeable to gas but substantially impermeable to the ink.

14. The inkjet ink cartridge according to claim 13, further comprising:

a filter provided in the inlet of the supply line.

15. The inkjet ink cartridge according to claim 14, wherein the filter is adapted to prevent impurities in the ink from entering the supply line.

16. The inkjet ink cartridge according to claim 15, wherein the filter is permeable to the ink but substantially blocks air bubbles when wetted.

17. The inkjet ink cartridge according to claim 13, wherein valve is an umbrella valve.

18. The inkjet ink cartridge according to claim 13, wherein the at least one vent is adapted to equalize the pressure within the chamber and the ambient pressure exterior of the chamber.

19. The inkjet ink cartridge according to claim 18, wherein when the altitude and/or temperature at which the vessel is maintained is increased, gas within the chamber passes through the at least one vent to equalize the pressure within the chamber to the ambient pressure exterior of the chamber.

20. The inkjet ink cartridge according to claim 18, wherein when the altitude and/or temperature at which the vessel is maintained is decreased, gas exterior of the chamber passes through the at least one vent to equalize the pressure within the chamber to the ambient pressure exterior of the chamber.

21. The inkjet ink cartridge according to claim 18, wherein when the amount of ink maintained within the chamber is decreased, gas exterior of the chamber passes through the at least one vent to equalize the pressure within the chamber to the ambient pressure exterior of the chamber.

22. The inkjet ink cartridge according to claim 13, further comprising:  
a fluidic interconnect provided in the opening,  
wherein the fluidic interconnect is permeable to liquid but substantially blocks air bubbles when wetted.

23. The inkjet ink cartridge according to claim 22, wherein the fluidic interconnect is of a type selected from the group consisting of open-foam and septum/needle.

24. The inkjet ink cartridge according to claim 13, wherein the at least one vent is a membrane.

25. A method of preventing back-pressure from developing in a chamber in a liquid supply vessel when the amount of liquid in the chamber decreases, the method comprising the steps of:

providing a chamber containing the liquid;

expunging at least some of the liquid from the chamber through an opening; and  
sucking gas into the chamber in a manner that is impermeable to liquid to equalize the pressure in the chamber with the ambient pressure exterior of the chamber, to prevent back-pressure from developing in the chamber.

26. A method of equalizing pressure in a chamber in a liquid supply vessel when the altitude and/or temperature at which the vessel is maintained is changed, the method comprising the steps of:

providing a chamber containing the liquid;  
changing the altitude and/or temperature at which the vessel is maintained; and  
equalizing the pressure in the chamber with the ambient pressure exterior of the chamber by sucking gas into, or exhausting gas out of, the chamber in a manner that is impermeable to liquid, to equalize the pressure in the chamber.

27. The method according to claim 26, wherein the step of equalizing the pressure includes:

- (a) exhausting gas if the temperature and/or altitude at which the vessel is maintained increases; or
- (b) sucking gas if the temperature and/or altitude at which the vessel is maintained decreases.